



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California**

VIA EMAIL AND U.S. MAIL

January 31, 2011

Edward Modiano
OPOG Project Coordinator
de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106

Re: EPA comments on OPOG's response to EPA Comments on ROP/WCC As-Built Report,
received on January 10, 2011

Mr. Modiano:

EPA has completed its review of OPOG's response to EPA Comments on ROP/WCC As-Built Report, received on January 10, 2011. EPA provides the following comments.

- 1) Please update the SSD OM&M manual to reflect the as-built equipment and drawings (e.g. installation of VGAC on SSDB-8 exhaust)
- 2) The SSD Health Risk Assessment(HRA) in memorandum dated December 15, 2010 should be revised as follows:
 - a. The HRA appears to be thorough; however the report does not include the HRA details. Please revise to include the dispersion modeling and breakdown of chemicals at each sampling point. Please include the entire risk assessment with data and calculations and resubmit a complete revised HRA analysis.
 - b. The flow rate at SSDB-8 is low compared to the other SSD extraction points. Please assess whether or not the newly added carbon drum and piping has resulted in a pressure drop and/or decrease in flow rate.
 - c. OPOG assumed the added carbon would reduce risk by 90%. Please provide additional details and documentation of the conditions at the outlet of the carbon drum.
 - d. Please provide documentation and/or a basis for the estimated 10-month carbon drum life. This is in contrast with the J&A SSD OM&M submittal that discusses the need for initial monthly sampling to establish a VGAC replacement frequency. Please revise the as-built submittal to state that the estimated carbon

life will be determined by initial monthly sampling as outlined in the OM&M manual.

- e. Based on the assumption of ambient plume temperature, the low height release points, and the proximity of the long term and acute impact points to the buildings, the plumes are likely being affected by building wake and downwash. The two release points with the highest cancer risk are SSDB-8 at 74% and SSDB- 1 at 13%.

However, three new stacks SSDB-9, -10 and -11 have been added to the WCC building after the original air sampling and HRA were completed. SSDB-9 and SSDB-11 are on the side of the building near the acute impact point and might contribute to that acute impact level. At the same time, newly installed SSDB- 10 is on the same side of the building as SSDB- 8 on the WCC building and SSDB- 1 on the ROP building and may have similar emissions to SSDB-8 and/or SSDB-1 due to close proximity to these two SSDB installations. The December 15, 2010 HRA report identified the need to control the emissions of SSDB-8; however, a new HRA is needed to determine the impacts of the three new release points and to assess whether carbon controls should also be added to SSDB-10 which may have similar emissions to SSDB-8.

- f. Please clarify the relationship between the HRA information provided in J&A's HRA information in their SSD OM&M Manual dated December 15, 2010 with the HRA information provided with the SSD As-built submittal dated November 19, 2010.
- g. The J&A analysis states that VGAC effluent from SSDB-8 must not exceed 25 cubic feet per minute (cfm) and that exhaust emissions should not exceed specific concentrations listed in the J & A OM&M Manual. The J&A submittal does not mention the need for 90% emissions control. Please reconcile the differences between the HRA information provided in the December 15, 2010 report and the J&A submittal to provide a consistent and unified HRA analysis.

3) The SSD Data sheets should be revised as follows:

- a. Sub-Slab Depressurization Vapor Monitoring Probe (VMP) Data Table The table should be labeled "Sub-Slab Depressurization Blower Data."
 - SSDB-1: The data for SSDB-1 is inconsistent and needs explanation. Flow tend to decrease with decreasing blower vacuum levels. Yet the vacuum levels at the blower suction decrease over time while the flow rates are increasing.
 - SSBD-4: The vacuum levels and flows do not show a consistent pattern; i.e., low flows do not correspond to low vacuum levels, etc. Please provide explanations, e.g. flow measurement equipment problems, etc.
 - SDB-8: Please include a discussion of the impact of adding a VGAC canister and any associated pressure drop to the SSDB-8 flow rate, e.g. please consider if a SSD blower with greater operating discharge pressure

might be required to maintain adequate soil vapor flow and if other mitigation measures would be appropriate.

b. Sub-Slab Depressurization Vapor Monitoring Probe (VMP) Data Table

- Per the original plans for the SSD system described in a memorandum dated July 20, 2010, the VMP vacuum levels should be maintained at 0.025-0.035 inches water column vacuum. More than half of the 30 VMP data points are below this target operating range. Please re-evaluate the SSD system and assess the need to install more robust vacuum blowers to achieve the desired vacuum levels.

Please provide a revised document within 14 days or by February 14, 2011.

If you have any questions about this letter, please contact me at (415) 947-4183.

Sincerely,

A handwritten signature in black ink, appearing to read "Lynda Deschambault".

Lynda Deschambault
Superfund Remedial Project Manager

CC VIA EMAIL:

Stephanie Lewis, California EPA, Department of Toxic Substances Control
Tom Perina, Ch2MHill



Re: Fw: EPA Comments on Revised Draft SSD As-Built and New Work at WCC

Lynda Deschambault to: Ed Modiano

02/02/2011 11:45 AM

Sent by: lynda deschambault

Cc: Frederick Schauffler, slewis1, Tom.Perina, Stephen Berninger, Matt Salazar, Keith Olinger

Ed.

Please find EPAs comments on the As Built for the Sub-Slab Depressurization (SSD) for Soil Gas Treatment at Women's Crisis Center and Regional Occupation Programs Buildings (JHA, November 19, 2010), and associated submittals provided to us in your January 10, 2010 email.

Please respond and make the appropriate revisions by Friday February 18th
As discussed, EPA would appreciate two hard copy copies of all final deliverables.

Lynda

Lynda Deschambault
Environmental Chemist
(415) 947-4183 phone
(415) 947-3526 fax

"The ultimate measure of a man [woman] is not where he [she] stands in moments of comfort and convenience but where he [she] stands at times of challenge and controversy." Rev. Dr. Martin Luther King Jr.



EPA comments on SSD AsBuilt 01.31.11.pdf

"Ed Modiano"

Lynda: Per EPA's comments submitted via email...

01/10/2011 05:54:04 PM

From: "Ed Modiano" <edm@demaximis.com>
To: Lynda Deschambault/R9/USEPA/US@EPA
Cc: "David Chamberlin" <ChamberlinDC@cdm.com>, "Sharon Wallin" <WallinSL@cdm.com>, <Tom.Perina@CH2M.com>, <slewis1@dtsc.ca.gov>, Frederick Schauffler/R9/USEPA/US@EPA
Date: 01/10/2011 05:54 PM
Subject: Re: Fw: EPA Comments on Revised Draft SSD As-Built and New Work at WCC

Lynda:

Per EPA's comments submitted via email on November 30, 2010 regarding the As-Built Report of the Sub-Slab Depressurization for Soil Gas Treatment at Women's Crisis Center and Regional Occupation Programs Buildings (JHA, November 19, 2010), the following documents are provided:

- Formal Responses to the EPA November 30, 2010 comments;
- Revised As-built report prepared by Jacob & Hefner dated December 15, 2010;
- SSD Health Risk Assessment Memorandum prepared CDM dated December 15, 2010; and
- SSD data tables

If you have any questions or require additional information, please contact me.

Sincerely,

Edward Modiano
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>>> <Deschambault.Lynda@epamail.epa.gov> 11/30/2010 1:48 PM >>>
Mr. Modiano,

Thank you for submitting your revised WCC/ROP As-Built report on November 24, 2010. Please note that this response to our comments was requested due back to EPA two weeks prior or November 7th. It is EPA's understanding that OPOG plans to start work at WCC Tomorrow. Prior to the start of that work, EPA provides the following comments:

- Please address EPA's previous comment (dated October 7, 2010) on the adequacy of one versus two suction pits . OPOG's discussion in the September 13 as-built submittal indicated that actual monitoring data after startup would be used to determine if a second SSD pit at the WCC building is needed. Based on the actual monitoring data, OPOG is now proposing to install not only a second but a third SSD suction pit. EPA concurs that OPOG should implement this approach. However, OPOG should document why the two additional suction pits are needed.
- OPOG discusses a "detailed Health Risk Assessment". Please provide a copy of this Assessment. OPOG should document why vapor treatment is needed.
- EPA previously requested that prior to start up of the SSD system, OPOG submit documentation regarding air permitting issues and concurrence from SCAQMD (e.g. that no SSD vapor treatment is required) . Please provide this documentation. Include the requested SCAQMD permit analysis, including actual and expected exceedances for individual VOCs. As part of this submittal, OPOG was to provide health risk calculations . This analysis should be provided for each suction pit vapor exhaust, and cumulatively (if required by SCAQMD requirements) .
---Please provide a better understanding of what levels were exceeded, for which chemical(s)
- EPA concurs that two additional VMPs inside the WCC footprint are needed . However, the two proposed additional locations (SSDVMP -11 and SSDVMP-12) are well inside the perimeter of the WCC building in contrast to all other VMPs that are all placed along the perimeter of each building. Please explain why these locations were selected. EPA suggests that OPOG consider locating SSDVMP-11 along the middle of the western

- perimeter of WCC and SSDVMP-12 in the southeast corner of WCC at the perimeter.
- Please provide a SSD system performance report with vacuum levels at each VMP, flows through each stack, key VOC concentrations, etc.
- Please provide a timeline/ schedule for the work to be performed.
- Also, Please provide an outline of deliverables and their schedule (e.g., the final/modified as-built report).
- Please provide additional information on the 55 gallon GAC drum(s) and impact on SSD operations. The SSD blowers have very low design discharge pressure levels. The installation of 55 gallon GAC vessel will increase the overall pressure drop through the system and may impact the actual suction flow rate and consequently the vacuum levels in the sub-slab that can be achieved. Please evaluate and report the impact of this additional carbon vessel on the SSD system flow capacity and achievable vacuum levels. Since the existing SSD pit exhaust requires treatment, please also evaluate and determine if 55 gallon GAC drums will be needed at the two new proposed SSD pits .
- Please provide additional detail on the location of the 55 gallon drum(s) on the roof and drum anchoring. The as-built report simply states the GAC drum will be placed on top of the roof so that it will be "out of the way." Please address Safety issues . (e.g. how will the drum be anchored to the roof so that it does not tumble off the roof in the event of an earthquake or temblor). How will the drum be exchanged and monitored.
- Has OPOG discussed the proposal and the aesthetics with the building owner who may also have concerns about aesthetics, and potential need for additional screening. e.g: visibility of the drum by the public.

Lynda

Lynda Deschambault
Environmental Chemist
(415) 947-4183 phone
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Rev. Dr. Martin Luther King Jr.

-----Forwarded by Lynda Deschambault/R9/USEPA/US on 11/26/2010 09:00AM -----

To: Lynda Deschambault/R9/USEPA/US@EPA

From: "Ed Modiano" <edm@demaximis.com>

Date: 11/24/2010 07:24AM

Cc: "David Chamberlin" <ChamberlinDC@cdm.com>, "Sharon Wallin" <WallinSL@cdm.com>, <Tom.Perina@CH2M.com>, "Ken Hewlett" <khewlett@demaximis.com>

Subject: Re: EPA Comments on Draft SSD As-Built Report for WCC/ROP

(See attached file: Tech Memo SSD_As-Built_101119.pdf)

Lynda:

Attached is the revised As-Built report that addresses comments from EPA. Also, the As-built report includes a discussion about the following additional work at the WCC building:

Additional Suction Pits at WCC

- Air quality levels inside at the WCC building continue to decline, however they remain just above EPA screening levels,
- OPOG is proposing to install two new suction pits, one along the eastern side of the building and one in the southwest corner (where the current monitoring point is located in the great room).
- Install one or two new monitoring points so that we can assess the effectiveness of the suction pits.

Treatment

- The existing suction pit at the northwest corner of the building will require treatment of the exhaust vapors. A 55 gallon drum filled with carbon similar to that used in an aquarium, attached to the end of the stack is proposed to be installed on the roof of the building. That's where the end of the stack is and it'll be out of everyone's way. It will be very low maintenance, requiring only occasional maintenance visits and annual service.

If you have any questions or require additional information, please contact me.

Sincerely,

Edward Modiano
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>>> <Deschambault.Lynda@epamail.epa.gov> 10/7/2010 11:04 AM >>>

Dear Mr. Modiano,

Attached please find our comments on the "Sub Slab Depressurization System As-Built Report for the Tri Cities Regional Occupational Program and Women's Crisis Center Buildings, Whittier, California" submitted by Omega Chemical Site PRP Organized Group (OPOG) on September 13, 2010. The report was prepared by Jacob Heffner & Associates on behalf of OPOG.

Please address these comments and resubmit by November 7, 2010.

Lynda

Lynda Deschambault

Environmental Chemist
(415) 947-4183 phone
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From: Ed Modiano [<mailto:edm@demaximis.com>]
Sent: Monday, September 13, 2010 3:47 PM
To: deschambault.lynda@epa.gov
Cc: David Chamberlin; Sharon Wallin; Perina, Tom/RIV; Ken Hewlett; LParnass@dtsc.ca.gov
Subject: Omega: Draft SSD As-Built Report for WCC/ROP

Lynda:

As requested, attached is the As-built Report for the Sub Slab Depressurization Systems that were recently installed at the Tri Cities Regional Occupational Program and Women's Crisis Center Buildings. The enclosed report was prepared by Jacob Heffner & Associates on behalf of the Omega Chemical Site PRP Organized Group.

If you have any questions or require additional information, please contact me.

Sincerely,

Edward Modiano
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cell: 619-991-9074[attachment "Omega SSD As-Built Submittal.pdf" deleted by lynda
deschambault/R9/USEPA/US]



Omega: Revision 3 to the SSD O&MM Manual
Ed Modiano

to:

Lynda Deschambault

04/26/2011 09:15 AM

Cc:

"Sharon Wallin", Tom.Perina, "Ken Hewlett", "stepanie lewis", Matt Salazar, "Greg Gibbs"

Hide Details

From: "Ed Modiano" <edm@demaximis.com> Sort List...

To: Lynda Deschambault/R9/USEPA/US@EPA

Cc: "Sharon Wallin" <WallinSL@cdm.com>, <Tom.Perina@CH2M.com>, "Ken Hewlett" <khewlett@demaximis.com>, "stepanie lewis" <slewis1@dtsc.ca.gov>, Matt Salazar/R9/USEPA/US@EPA, "Greg Gibbs" <ggibbs@jacobandhefner.com>

History: This message has been forwarded.

1 Attachment



2011-04-15_Omega_SSD_OMM_Manual_Rev03.pdf

Lynda:

Attached is Revision No.3 to the Operations and Maintenance Manual (OM&M) for the Sub Slab Depressurization (SSD) Systems at the Tri Cities Regional Occupational Program (ROP) and Women's Crisis Center (WCC) buildings. The enclosed report was prepared by Jacob & Hefner Associates on behalf the Omega Chemical Site PRP Organized Group. Revision No.3 to the OM&M includes information regarding the additional suction pits and vapor monitoring points installed at the WCC/ROP buildings in March 2011.

If you have any questions or require additional information, please contact me.

Sincerely,

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